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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	09/843,429	MARSH ET AL.	
	Examiner	Art Unit	
	Tuan A. Vu	2193	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *19 February 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,2,4-16,18-24 and 26-35* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,2,4-16,18-24 and 26-35* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This action is responsive to the Applicant's response filed 2/19/2008.

As indicated in Applicant's response, claim 35 has been amended. Claims 1-2, 4-16, 18-24, 26-35 are pending in the office action.

Claim Objections

2. Claim 15 is objected to because of the following informalities: the phrase 'data processor *comprising* a call controller' and the phrase 'data processor *comprising* a gateway' amount to a syntactic misuse of the term 'comprising'. In terms of commonly accepted meaning or reasonable interpretation, 'data processor' signifies a hardware-embodied unit that operates as a software executing device, whereas 'comprising' as contextually recited entails that each of the 'gateway' and 'call controller' is **included** among other components of such 'data processor' in the same sense that a runtime memory is part of a computer. The Specifications does not describe any particular 'first data processor' that includes one component being a gateway; nor does it illustrate a particular 'second data processor' that includes one component being a 'call controller'. The Drawings (e.g. Figure 2) describes *softswitch* and *media gateway* being part of a switching system 25, and none of whose related text in the Disclosure explicitly describes such switching system as having each two distinct data processors *each comprising* (emphasis added) respectively, a gateway and a softswitch (i.e. call controller). Appropriate correction is required. The data processor will be treated as the processing capability integral to the 'call controller' or the 'gateway'.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claim 35 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Specifically, claim 35 recites a first data processor comprising a call controller and a second data processor comprising a management system. However, the 'management system 46' as shown in Figure 2, or 3 amounts to a software layer or component *within* (emphasis added) the architecture of a softswitch (see Fig. 2, 5), with no relationship to any processor; nor is the 'call controller' or *softswitch* 26 described any where in the Specifications as being part of one 'data processor' distinct from that for the 'management system'. With the understanding that softswitch is a 'call controller' (top pg. 6) as set forth in the Specifications, the introduction of the term 'processors' at page 29 does not make it explicitly clear that one instance of such processors implements one instance of 'management system 46' of architecture (in Fig. 2) or a call controller 26 . The *management system* cannot be construed as being implemented integral to one data processor; nor can the 'call controller' be construed as being part of one data processor as distinguished by the claim language. The 'data processor' for lack of teaching in the Specifications in relation to what the claimed 'management system' and 'call controller' entail is deemed not enabled by the Disclosure in sufficient terms for enabling one to construe that the inventor does possess two distinct processors each to embed one management system 46

and one call controller 26, respectively. These 'data processor' will be treated as mere software component or layer to implement the functionality of the above.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 1-2, 4-16, 18-24, 26-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reifer et al, USPN: 6,421,727 (hereinafter Reifer) in view of APA (admitted prior art: Background of Invention, Specifications - pg. 1)

As per claim 1, Reifer discloses method comprising:

downloading a call service component to a call controller (e.g. provider … download - col. 9, lines 7-28) in response to a network carrier action (e.g. Service Provider's location - col. 9, li. 7-14 – Note: provider's action reads on download in response carrier action to a call controller for using the downloaded Java application) that corresponds to the call service component (Note: Java application being downloaded for service activation, suspension, deactivation reads on call service component),

wherein the call service component is for a particular user area comprising a plurality of users (e.g. e.g. col. 3, lines 52-67; col. 4, lines 46 to col. 5, line 17; Fig. 4; Fig. 8), wherein a call service component is not for a per-call basis (e.g. Fig. 8-9 -Note: Software downloaded to a SPNet controller location to support software execution related to SPNetclient portions in BSCS gateways in conjunction with functionality portion at SPNet server for activation/deactivation,

paging roaming etc. – see col. 8, line 41 to col. 9 line 15 – reads on download of code that would be used by a provider control location for servicing all customers for the gateways covering area - col. 3, lines 52-67 - in general, i.e. not a per call basis type download);

using the call service component to support telecommunication traffic to or from a gateway under control of the call controller (e.g. *activation* – col. 5, li. 38-50; Fig .11; col. 9, li. 15 to col. 10, li. 67; *Activate, Suspend, Deactivate* – Fig. 11).

Reifer does not explicitly disclose: the action of downloading to a service provider is for turning on a new service, and removing the call service component from the call controller when the network carrier shuts off the new service corresponding to the call service component for the particular user area in the network. New functionality provided to telecommunications system via upgrades was known concept at the time of the invention (see *Upgrades often need to be made* - APA). Accordingly, based on Reifer's download of Java components for instantiating new or added functionality of the SPNet server (see col. 8, lines 26-40) as to maintain support all gateway's connected users as set forth above, the reactivating (via re-installing) of newly added or upgrade code at the SPNet controller is strongly implied as well as the deactivating of the older Java components as a result thereof. Based on known practice for restarting a program after installation or upgrade, it would have been obvious for one skill in the art at the time the invention was made to implement turning on of newly installed SPNet-server service component (i.e. the newly acquired Java-based functionality) to support a new or upgrade in the servicing (as mentioned by APA) of telecommunication users pertinent to the related gateways in Reifer's GBS area, as well as removing the older call service component in terms of the GBS carrier shutting off (deactivating) the replaced service component in favor of the newly activated

component, because this would maintain consistent support of the area of service covered by Reifer's GBs provider with the most upgraded and latest software support (see *upgrades* - col. 21, li. 30-60) as soon as new upgrades are identified to improve SPNet server's functionality.

As per claim 2, Reifer discloses including dynamically downloading the call service component (e.g. Fig. 9; see col. 8, lines 26-40; col. 10, lines 9-19).

As per claim 4, Reifer discloses a half-call model that views a call either as an originating or a terminating segment of the call (e.g. *deactivate* - Fig 10, 1 – Note: every call request or service is composed of half-call to activate or deactivate with respect to originator and destinator – see *portion of a call* – col. 7, line 12-14).

As per claim 5, Reifer discloses downloading the call service component (refer to claim 1-2) and in view of of upgrade storage from some directory by Reifer (*from SPNet database ... changes to the IRIDIUM network* – col. 21, li. 30-50) and the service provider database (see BSCS, SPNet database Fig. 7; *SPNet Tables & stored procedures --→ SPNet Server* – Fig. 8), discloses downloading from a central repository.

As per claim 6, Reifer discloses wherein each segment of the call handles service and access protocols according to a previously downloaded call service component with which the segment is associated (e.g. *portion of a call* – col. 7, line 12-14; RTX records – Fig. 7; Customer contract …Contract Search – Fig. 10-11; Matching 620 – Fig .6).

As per claim 7, Reifer discloses wherein each call service component comprises a wrapper surrounding a set of core functions (e.g e.g. col. 3 li. 54-67; *message services* – col. 4, lines 5-17), wherein the wrapper supports dynamic downloading of the component (re claim 1 -

Note: a service to parse a message reads on a wrapper, a message being an inter-application interface including core functions encapsulated within that are to be parsed) to the call controller.

As per claim 8, Reifer does not explicitly disclose wherein downloading the call service occurs while the call controller is operational and supporting live traffic, the call service being downloaded without disrupting the live traffic. But based on the administration module and intervention in upgrading of data/software related to call services (Fig. 11-12; *automatically downloaded to the SP's computer* - col. 10, lines 9-19), it would have been obvious for one skill in the art at the time the invention was made to implement SPNet Administration console-based steps taken so that the downloading --effected via an administrator as set forth above-- is effectuated in a timely fashion so that software supporting roaming, activation/deactivation of current call activities are not interrupted, because software upgrade after being downloaded cannot be dynamically activated (as set forth in the rationale of claim 1) when pending threads from a older version of software have not terminated; that is, the use of Administrator would be to determine a proper time for such replacement of code.

As per claim 9, Reifer discloses wherein the call service component comprises an application component for implementing call behavior (e.g. e.g. col. 7, li. 49 to col. 8, li. 40; col. 9, line 40 to col. 10, line 37).

As per claim 10, Reifer discloses wherein the call service component comprises a resource component for providing access to telephony resources (col. 7, li. 49 to col. 8, li. 40; col. 9, line 40 to col. 10, line 37) by an application component that implements call behavior (e.g. Fig. 11-14).

As per claims 11-12, Reifer discloses establishing a call having an originating segment and an terminating segment (re claim 4: col. 7, line 12-14); but does not explicitly disclose that the originating segment uses the call service component downloaded to the call controller; and wherein the call service component downloaded to the call controller represents a first call type, and wherein the call has a terminating segment that represents a different call type. But based on the download of application code to support client interaction with SPNet (see col. 9, li. 15 to col. 10, li. 67; Activate, Suspend, Deactivate – Fig. 11) it would have been obvious for one skill in the art to utilize the above downloaded code to support Reifer's above implied teaching via a Gateway for addressing an originating segment and an termination segment to support the client's endeavor about the activation/deactivation process as established by the SPNet service in light of the client interactive process based thereon (see Fig. 10-12).

As per claim 13, Reifer discloses establishing a call (to a database) having a terminating segment that uses the call service component downloaded to the call controller, in light of the rationale as to update or provide replacement code to the gateway controller software from claim 1.

As per claim 14, Reifer discloses wherein the call service component downloaded to the call controller represents a first call type, and wherein the call has an originating segment that represents a different call type (see Fig. 1-2 – Note: varying with the area of the wireless coverage of a transponder or satellite, the type of call therein reads on different type).

As per claim 15, Reifer discloses a telecommunication system comprising:

a data store comprising a repository of call service components (e.g. provider … download -col. 9, lines 7-28);

a first data processor comprising a call controller (e.g. SPNet server – Fig. 8; Fig. 9 – Note: first processor treated as processing capability of a call controller – see Claims Objection); and a second data processor comprising a gateway under control of the call controller (e.g. GBS – Fig. 4, 8 – Note: second processor treated as processing capability of a gateway);

wherein the call controller is configured for downloading a call service component from the repository in response to a network carrier (e.g. Service Provider's location - col. 9, li. 7-14) action that corresponds to the call service component (e.g. *download* - col. 9, li. 7-14; – Fig. 9),

wherein a call service component downloaded is for a particular user area comprising a plurality of users (e.g. col. 3, lines 52-67; col. 4, lines 46 to col. 5, line 17; Fig. 4; Fig. 8), not on a per-call basis (e.g. Fig. 8-9- Note: Software downloaded to a SPNet controller location to support software execution related to SPNetclient portions in BSCS gateways in conjunction with functionality portion at SPNet server for activation/deactivation, paging roaming etc. – see col. 8, line 41 to col. 9 line 15 – reads on download of code that would be used by a provider control location for servicing all customers for the gateways covering area - col. 3, lines 52-67 - in general, i.e. not a per call basis type download);

using the call service component to support telecommunication traffic to or from the gateway (e.g. *activation* – col. 5, li. 38-50; Fig .11; col. 9, li. 15 to col. 10, li. 67; *Activate, Suspend, Deactivate* – Fig. 11).

Reifer does not explicitly disclose: the action of downloading to a service provider is for *turning on a new service*, and *removing the call service component* from the call controller when the network carrier *shuts off* the new service corresponding to the call service component for the

particular user area in the network. But this limitation has been rendered obvious in light of the rationale set forth in claim 1.

As per claims 16, 18-21, and 22, refer to corresponding rejection set forth in claims 2, 4, 6-8, and 9-10, respectively.

As per claim 23, Reifer discloses an article comprising a computer-readable medium storing computer-readable instructions for causing a computer system to:

download a particular call service component from a repository of call service components in response to a network carrier action that corresponds to the particular call service component for a particular user area comprising a plurality of users wherein a call service component is downloaded not on a per-call basis;

use the particular call service component to support telecommunication traffic to or from a gateway under control of a call controller;

all of which limitations having been addressed in claim 1;

Reifer does not explicitly disclose: the action of downloading to a service provider is for *turning on a new service*, and *removing the call service component* from the call controller when the network carrier *shuts off* the new service corresponding to the call service component for the particular user area in the network. But this limitation has been rendered obvious in light of the rationale set forth in claim 1.

As per claims 24, 26-31 and 32-33, refer to corresponding rejection set forth in claims 2, 4, 6-10, 13 and 12, respectively

As per claim 34, Reifer discloses a method comprising

dynamically downloading a call service component to a call controller when a network

carrier takes action corresponding to call service component, for a particular user area that comprises a plurality of users (refer to claim 1 for corresponding rejection), wherein a call service component is downloaded not on a per-call basis (re claim 1);

using the call service component to support telecommunication traffic to or from a gateway under control of the call controller (refer to claim 1); wherein the call component comprises a wrapper surrounding a set of core functions, wherein the wrapper supports the dynamic downloading of the call service component (re claim 7).

Reifer does not explicitly disclose: the action of downloading to a service provider is for *turning on a new service*, and *removing the call service component* from the call controller when the network carrier *shuts off* the new service corresponding to the call service component for the particular user area in the network. But this limitation has been rendered obvious in light of the rationale set forth in claim 1.

As per claim 35, Reifer discloses a system comprising:

a network carrier (Fig. 1-2),

a plurality of switching systems each comprising a plurality of media gateways associated with the network carrier (Fig. 1-3; col. 3, lines 52-56);

a first data processor comprising a *call controller* adapted to control a first one of the media gateways (e.g. BSS, GBS – Fig. 4; Fig. 8-9 – Note: first data processor treated as software implementing the *call controller* - see the USC 112, 1st rejection);

a second data processor comprising a *management system* (e.g. Fig. 8-9; col. 9, li. 7-14 – Note: service provider in conjunction with machine to received download reads on management

system in second data processor wherein the data processor is treated as functionality of this management system – see USC 112, 1st rejection) associated with the call controller;

wherein the management system is adapted to:

direct dynamic downloading of a service component (refer to claim 1) to the call controller through when the network carrier takes action in the service area of the plurality of media gateways (e.g. col. 3, lines 52-67; Fig. 1; *gateways 110*, col. 4, lines 63-64), wherein a call service component is downloaded not on a per-call basis (re claim 1);

wherein the service component comprises a set of core functions surrounded by a wrapper, the set of core functions provides functionality associated with the service component, and the wrapper supports the dynamic downloading (re claim 7) and control configuration of the first media gateway and the call controller (Fig. 4, 8; Fig. 11-14); wherein the call controller is adapted to use service component to support telecommunication traffic to or from the first media gateway (re claim 1).

Reifer does not explicitly disclose: the action of downloading to a service provider is for *turning on a new service*, and *removing the call service component* from the call controller when the network carrier *shuts off* the new service corresponding to the call service component for the particular user area in the network. But this limitation has been rendered obvious in light of the rationale set forth in claim 1.

Reifer does not disclose dynamic downloading through Java Dynamic Management Kit framework; but in view of the interactive application where the downloaded Java component is used to manipulate application definition, Javascript editing, form filling based user's interaction

and browser-based (or GUI-tool) modification for the call service (see col. 9, line 7 to col. 10, line 67; Fig. 11-14), the Java framework is disclosed.

Response to Arguments

7. Applicant's arguments filed 2/19/08 have been fully considered but they are not persuasive. Following are the Examiner's observation in regard thereto.

35 USC § 103 Rejection:

(A) Applicants have submitted that the cited passage by Reifer about user by way of a browser for downloading a Java application does not point to 'downloading … in response to a network carrier action', and so, in the sense that the object of download is a 'call service component' as claimed (Appl. Rmrks pg. 10, middle). The language of the claim has been interpreted and thereby matched with Reifer as follows.

Reifer teaches action taken by a service provider to download Java application, which after being downloaded can be used to control a call. The language recited as 'network carrier turning on the new service' is interpreted as a provider action to providing functionality in a call controller system by downloading the necessary Java application thereto, which Java application when activated after installation, would operate as a application being turned on anew to provide functionality phrased as 'service provisioning' by Reifer (see col. 9, lines 7-14); thus, Reifer has disclosed 'network carrier action' by way of the action by the provider; 'call controller' in terms of the system recipient of the Java application being purported for the above provisioning functionality, and 'call service component' in terms of this very Java application purported for servicing like 'activation, suspension, reactivation, and deactivation' for telephone, paging and roaming. When Reifer's downloaded code is for providing a variety of services, it is deemed

that such Java instance is not for per-call basis but rather as a network-intended application useable for a entire area and for many call servicing instances under the jurisdiction of Reifer's Irisium network and its corresponding database (see Fig. 2, 8, 9). The language of the claim does not provide necessary specifics in order to otherwise preclude Reifer's teaching from fulfilling the subject matter in say, claim 1, in light of above analysis. Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the reference. Besides, the § 103 rejection includes combination of teachings, and when the argument is analyzing one reference, it is deemed that the argument is not commensurate with the grounds of rejection. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.,* 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

(B) Applicants have submitted that Reifer teaching that service provider uses a browser to logon and configure connect to a gateway does not disclose 'call service component' downloaded in response … carrier turning on a new service … corresponds to the call service component' (Appl. Rmrks pg. 10, bottom). The logon aspect of Reifer is about one of many features offered by the Java code after its being downloaded and activated for use by any Browser-based administrative task. The download by Reifer has been deemed sufficient to read on the claim language of claim 1 as analyzed in section A above. The argument is thus not sufficient to overcome the teachings by Reifer based on interpretation of that language.

In all, the claims will stand rejected as set forth in the Office Action.

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan A Vu whose telephone number is (571) 272-3735. The examiner can normally be reached on 8AM-4:30PM/Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lewis Bullock can be reached on (571)272-3759.

The fax phone number for the organization where this application or proceeding is assigned is (571) 273-3735 (for non-official correspondence - please consult Examiner before using) or 571-273-8300 (for official correspondence) or redirected to customer service at 571-272-3609.

Any inquiry of a general nature or relating to the status of this application should be directed to the TC 2100 Group receptionist: 571-272-2100.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Tuan A Vu/

Primary Examiner, Art Unit 2193

May 14, 2008